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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,323	07/30/2001	Mark A. Kirkpatrick	BS01-091	9192

45695 7590 07/14/2005

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EXAMINER
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NGUYEN, TRONG NHAN P

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/916,323

Applicant(s)

KIRKPATRICK ET AL.

Examiner

Jack P. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

This action is in response to Applicant's amendment filed on 2/11/05. Claims 1-62 are being examined.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rajakarunanayake et al, 6,463,528 (Raja hereafter) in view of Bahrs et al, 6,782,508 (Bahrs hereafter).**

As per claim 1, Raja discloses a client-server computer system comprising: at least one client application server (180, fig. 1; portable system is a client application server 'CAS') having an application, including configuration variables that configures the application for operation (col. 2, lines 24-27, 31-38; CAS provides configuration parameters or variables to configure targeting applications such as the ones in the customer premise equipment 'CPE'); an application properties server 'APS' (160, fig. 1; central system stores configuration variables or parameters that can be accessed by

CAS) accessible by at least one of said client application servers, said application properties server coupled to said at least one said client application server for providing configuration variable data in response to a request from said at least one said client application server (col. 2, lines 34-41; col. 5, lines 39-48; upon receiving a request for configuration service by a client, the CAS accesses the APS to retrieve configuration parameters or variables to process the request); an administration system coupled to said application properties server (col. 5, lines 4-8, 26-32; col. 6, lines 22-25; it's inherent the central system (160, fig. 1) is coupled to an administration system that regulates the authorizations and authentications of authorized users by the service provider); and a storage medium coupled to said application properties server and said administration system for centrally storing said configuration variable data (col. 5, lines 4-8, 26-32; col. 6, lines 22-25; central system stores configuration data in its databases to be retrieved or accessed by users). Raja further discloses using the command line interface 'CLI' to issue or send configuration commands (col. 3, lines 56-62; system administrator uses CLI to issue syntax commands to configuration data) but does not explicitly disclose using a hash function to specify how the data is to be returned. The concept of using a hash key or hash function to access/retrieve/store data is well known and would have been obvious to one of ordinary skill in the art at the time of invention. The motivation to use a hash key (or hash code) is to provide a more efficient and rapid way to access data items in a database for viewing or retrieving of data by reducing high amount of data overhead (see Bahrs teachings for using hash code – col. 60, lines 46-55).

**Claims 2-10, 15-22, 26-28, 35-44, 46-51, and 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead et al, 6,085,030 (Whitehead hereafter) in view of Rajakarunanayake et al, 6,463,528 (Raja hereafter).**

As per claims 2, 15, 26 and 35, Whitehead teaches a client-server computer system comprising:

a plurality of client application servers (104, fig. 1, col. 6, lines 15-19; col. 9, lines 2-6; *some of the nodes in element 104 designate as client application servers; Java Remote Method Invocation 'RMI', Common Object Request Broker Architecture 'CORBA', Internet are examples of some of the client application servers*) operating multiple computer network protocols, each client application server having an application including data components or variables that configure the application for operation (col. 2, lines 54-57; *system operates using plurality of network protocols including UDP, TCP/IP, SAP, etc.*); an application server (280, fig. 2, col. 14, lines 6-7; *now refers to as component management server (CMS)*) network accessible by said plurality of client application servers via at least one application software protocol (col. 2, lines 39-41; *Java service broker application protocol such as Remote Method Invocation (RMI) is being deployed in the system*), wherein said application server provides information in response to at least one data request from at least one client application server (abstract, col. 8, lines 3-14); and, a storage medium coupled to said application server network, wherein said storage medium stores updated system data variable information, and is administered by a server coupled to said client-server

system (250, fig. 2, col. 4, lines 36-45; col. 7, lines 55-61; col. 8, lines 44-46; *persistent storage of component registry stores data objects/components manageable and administrable by component administration application (260, fig. 2) coupled to the application server; data components include some of the following – e.g., software components/routines, data objects, data services, etc.*) Whitehead further discloses in the background of the invention the software components are distributed across the networks and the ability to locate and re-use the components (col. 1, lines 25-31).

Some of the software components are data objects and services and the methods of locating the components (e.g., hardcoding addresses, configuration files, command line parameters, etc.; col. 1, lines 36-42). However, Whitehead does not explicitly disclose the data components or objects being configuration variables. However, it would have been obvious to one of ordinary skill in the art at the time of invention to know that configuration files may be used to locate configuration variables or objects stored in a system across the network. In addition, it is further evidenced that the concept of downloading configuration variables (or objects) from a central system is well known in the art as disclosed in an analogous art to the claimed invention by Raja. In this disclosure, Raja teaches the client application system retrieving configuration variables from a central system (col. 5, lines 29-34; col. 6, lines 22-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify and/or combine the teachings of Whitehead and Raja to centrally stored reusable data objects (e.g., configuration variables) and the ability to download the data objects by the client application system when desired.

Claims 46, 47, 50, 51, and 60 are rejected for similar reasons as claim 2 addressed above. Whitehead further teaches means for updating said relational database based on current configuration requirements of said system (col. 8, lines 19-22); means for sending a configuration result from the application server (280, fig. 2; CMS) to customer (210, fig. 2; *component consumer application is the requesting customer*) based at least in part on the configuration request (col. 8, lines 32-35).

As per claims 3 and 5, Whitehead teaches the storage medium comprises Oracle database (col. 8, line 1) and tables are searchable by said application server network in response to a request from at least one client (col. 8, lines 3-9; *server searches in storage tables for desired data in response to client request.*)

As per claims 4, 6, 7 and 8, Whitehead teaches the storage schema of configuration information in the form of Lightweight Directory Access Protocol (or LDAP) [col. 7, lines 62-66] and configuration information is dynamically updateable by an external administrator (880, fig. 8A, col. 13, line 67 – col. 14, lines 7; *administrator can dynamically configure and update all groups and their individual components.*)

As per claims 9-10, Whitehead teaches at least one client is coupled to application server network via a Java RMI application interface (col. 2, lines 39-41; see *RMI reference in claim 2 above*).

As per claims 16, 17, 19, 39, and 41 are rejected for similar reasons as claim 2. Whitehead further teaches the means for interfacing said plurality of client application (104, fig. 1, col. 6, lines 15-19; *some of the nodes in element 104 designate as client application servers*) and database (250, fig. 2; *component registry stores component*

*functions in the database*) servers to means for performing configuration services includes a CORBA server application (330, fig. 3) and for handling (Java) RMI (col. 9, line 3) requests for configuration services (col. 9, lines 47-56.)

Claims 18, 27, 36, 40, 48, and 49 are rejected for similar reasons as claims 3-8 addressed above.

Claims 20, 22, 42, 44, and 59 are rejected for similar reasons as claims 9-10 above.

Claims 21, 26, 35, 38, and 43 are rejected for similar reasons as claims 2, 16, 17, 19, 39, and 41 addressed above.

**Claims 11-14, 23-25, 29-34, 45, 52-58, and 61-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead in views of Raja and Bahrs et al, 6,782,508 (Bahrs hereafter).**

As per claims 11-14, Whitehead does not teach configuration information is stored and retrieved from said storage medium via Key Value Pairs or Hash table. However, Bahrs discloses data objects stored by storage medium can be accessed using key/value pairs (col. 31, line 67) and hash table (col. 61, lines 14-17). Hence, it would have been obvious to one of ordinary skill in the art to use key/value pair and hash table to accelerate and optimize the configuration and validation of desired data elements during data processing.

As per claim 23, Whitehead teaches client application servers can send requests to CMS for data components and services processing using a plurality of application protocols such as Distributed Component Object Model (DCOM) [col. 2, line 1], Java



RMI (col. 2, line 39), Common Object Request Broker Architecture (CORBA) [col. 2, line 63], etc. Whitehead does not specifically teach service broker framework implemented using XML configuration file. However, Bahrs teaches data objects can be supported by using XML (col. 15, line 54). Hence, it would have been obvious to one of ordinary skill in the art to use XML among other technologies (col. 15, lines 54-55) to build applications to share and exchange data across the Internet as disclosed in [col. 65, lines 54-56.]

Claims 24, 25, 33, 34, 57, and 58 are rejected for similar reasons as claims 11-14 addressed above.

Claims 29-30 are rejected for similar reasons as claims 4, 6, 7, and 8 addressed above. Whitehead further teaches administrative manipulation functions can be done and distributed to systems over the entire network (col. 10, line 67 – col. 11, line 5). Whitehead does not specifically disclose configuration functions could be maintained remotely. However, it is well known and would have been obvious to one of ordinary skill in the art to modify the teachings of Whitehead to provide administrative functions that could be accessed remotely from any location in a distributed network system by a plurality of authorized users to save on support costs by increasing operational efficiency.

As per claims 31-32, Bahrs teaches data can be in the form of a string (col. 17, line 42).

Claims 45, 56, and 62 are rejected for similar reasons as claims 11-14 addressed above.

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As per claims 52-55 and 61, Whitehead teaches creating a connection between property server objects and data schemas and pooling server objects with client application servers (col. 8, lines 3-9; *server objects are being processed in component registry in response to client application requests*). Whitehead does not teach initializing property server objects. Bahrs teaches initializing graphical components of data containers (col. 32, lines 35-38; *panel is a data container that stores data objects and components as disclosed in [col. 32, lines 23-24 and 26]*). Hence, it would have been obvious to one of ordinary skill in the art to initialize data objects to desired values in order to refresh residual data that may be undesirable.

### ***Response to Arguments***

Double patenting rejections are withdrawn. Applicant's arguments filed on 2/11/05 have been fully considered but are moot based on new ground of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure – US Pat 6,047,323; 6,157,634; 6,081,517; 6,453,356; 6,202,096; 6,141,691

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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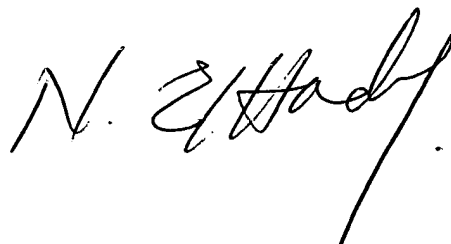
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P Nguyen whose telephone number is (703) 605-4299. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "N. Z. Hardy", is located at the bottom right of the page. The signature is written in a cursive, flowing style.